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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/480,908	06/07/1995	GARY K. MICHELSON	P-12552	9745
22882	7590 12/28/2005		EXAMINER	
MARTIN & FERRARO, LLP			BROWN, MICHAEL A	
1557 LAKE C HARTVILLE	PINES STREET, NE OH 44632		ART UNIT PAPER NUMBER 3764	
	,			

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	08/480,908	MICHELSON, GARY	<b>⟨</b> .				
Office Action Summary	Examiner	Art Unit					
	Michael Brown	3764					
The MAILING DATE of this communication Period for Reply	appears on the cover she	et with the correspondence addres	SS				
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING.  Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory provided in the set or extended period for reply will, by some any reply received by the Office later than three months after the rearned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMN FR 1.136(a). In no event, however, rn. eriod will apply and will expire SIX (6 statute, cause the application to become	IUNICATION. may a reply be timely filed  B) MONTHS from the mailing date of this community ome ABANDONED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on _	·						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑							
3) Since this application is in condition for all	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice und	ler Ex parte Quayle, 1935	5 C.D. 11, 453 O.G. 213.					
Disposition of Claims							
4) Claim(s) <u>1-9,11-25,28-156,158-162,164-1</u>	68,170-174,176-180 and	182-194 is/are pending in the app	lication.				
4a) Of the above claim(s) is/are with							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-9, 11-25, 28-156, 158-162, 164</u>	<u>-168, 170-174, 176-180,</u>	<u>182-194</u> is/are rejected.					
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction a	nd/or election requiremen	ıt.					
Application Papers							
9) The specification is objected to by the Exar	niner.						
10) The drawing(s) filed on is/are: a)		ed to by the Examiner.					
Applicant may not request that any objection to							
Replacement drawing sheet(s) including the co	rrection is required if the dra	awing(s) is objected to. See 37 CFR 1	.121(d).				
11)☐ The oath or declaration is objected to by th	e Examiner. Note the atta	ached Office Action or form PTO-1	·52.				
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for for	eian priority under 35 H S	S.C. & 119(a)-(d) or (f)					
a) ☐ All b) ☐ Some * c) ☐ None of:	olgh phoney and or or old						
1. Certified copies of the priority docun	nents have been received	1.					
2. Certified copies of the priority docum							
3. Copies of the certified copies of the			ge				
application from the International Bu	reau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a	list of the certified copies	s not received.					
Attachment(s)							
1) Notice of References Cited (PTO-892)		view Summary (PTO-413)					
2) 🔲 Notice of Draftsperson's Patent Drawing Review (PTO-948 3) 🔀 Information Disclosure Statement(s) (PTO-1449 or PTO/St		er No(s)/Mail Date  ce of Informal Patent Application (PTO-152)	2)				
Paper No(s)/Mail Date	6) Othe						

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 9, 11-25, 28-31, 33-75, 77-153, 158-159, 164-165, 170-171, 176-177, and 182-192 are rejected under 35 U.S.C. 103(a) as being unpatentable over Godefroy in view of Kulich (5,458,638).

Godefroy discloses in figures 1-9 an interbody spinal implant comprising a body (the body in fig. 1), having an insertion end 3, a trailing end (at 22), including a thread (13, 14), the body is substantially frusto-conical shaped (fig. 1), the body is substantially cylindrical shaped (fig. 1), the leading end 3 is larger than the trailing end (fig. 1), the implant includes a bone ingrowth material, fusion promoting material 100, the body has openings (9, 10), the thread radius is variable (because of the shape of the body), the body is a porous material (having openings), an internal chamber (the inside of the body), a wall 2 surrounding the inner chamber, the wall has openings ((9, 10), an engagement means (col. 3, lines 45-47), at least one truncated side 6, that forms a planar surface (fig. 4), the body has an upper portion (fig. 1) and a lower portion (fig. 1), a second truncated side 5, the body is made of a material stronger than bone (metal). Godefroy discloses an implant comprising a pair of arcuate surfaces (the surfaces of 2 and 4) and a pair of planar surface (the surfaces of (5, 6). However, it could be argued

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that Godefroy doesn't disclose threads on the body, a means for closing the body, the body having wells having partial walls, a thread being on the truncated wall. Kusclich teaches in figures 2a a tapered spinal implant comprising threads (26, 28) along truncated walls (fig. 2), a means (18, 20) for closing the implant and the body having wells (the wells are formed between the threads). It would have been obvious to one having ordinary skill in the art at the time that the invention was made that the spinal implant disclosed by Godefroy could be fabricated with threads along the truncated side walls, means for closing body, wells on the body and threads along the entire walls of the truncated implant. The threads on the truncated planar walls would assist in holding the device in place. The means for closing the body would prevent bone chips or bone grafts from coming out of the implant. The wells would allow bone to grow around the implant. The thread on the outside of the body could be constant or vary. The length, diameter, the insertion end and the trailing end could be within the ranges recited in the claims, because these dimensions are not critical.

Claims 8, 32, 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims above, and further in view of Ray (4,904,260).

Ray teaches in figures 1 a spinal implant that can be made of a bioabsorable material (col. 5, lines 54-58). It would have been obvious to one having ordinary skill in the art at the time that the invention was made that the implant disclosed by Godefroy and taught by Kuslich could be fabricated of a bioabsorbable material as taught by Ray in order to allow the implant to absorb into the body after the healing process is completed.

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Claims 154-156, 160-162, 166-168, 172-174, 178-180 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims above, and further in view of McKay.

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McKay teaches a spinal procedure comprising bone promoting substances that include bone m9orphogentic protein (claim 11, lines 2-3), hydroxyapatite (claim 17, line 2) or hydroxyapatite tricalcium phosphate (claim 17, lines 2-3). It would have been obvious to one having ordinary skill in the art at the time that the invention was made that the bone promoting substances as taught by McKay could be substituted for the bone promoting substances disclosed by Godefroy and taught by Kuslich because either substance could be used to create fusion between the spinal implant and the vertebrae.

Claims 193-194 are rejected under 35 U.S.C. 103(a) as being unpatentable over Godefroy in view of Kusclich, along with Ray.

Godefroy discloses in figures 1-5 an implant comprising a load bearing element (the body in figure 1), having opposite end pieces (fig. 1). However, Godefroy doesn't disclose a central element or an osteogenic material. Kusclish teaches in figure 11 an implant comprising a central element 136. Ray teaches an implant having an osteogenic material. It would have been obvious to one having ordinary skill in the art at the time that the invention was made that the central element as taught by Kusclish could be incorporated into the implant disclosed by Godefroy in order to used the central element to assist in bearing the load on the implant. The osteognic material as taught by Ray could be used to enhance fusion around the implant.

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## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. No additional prior art was cited in this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Brown whose telephone number is 571-272-4972. The examiner can normally be reached on 5:30 am-4:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gergory Huson can be reached on 571-272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Brown December 22, 2005

> MICHAEL A. BROWN PRIMARY EXAMINER

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